

5/46

14

DART AEROSPACE

Description: Bracket asse

Note: D3159-043 / -044 sa

Drawing: D3159 Rev. A 8

RF 04.11.29

Step	Location
1	EXPEDITING

2	HAAS
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Blank size: 2.560" x 1.545" x .063" thick.
Grain along 1.545"
Matl: 6061-T6 .063" thick

Batch M18556

3	QC
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Inspect Level 2

4	QC
---	----

Inspect Level 8

5	METAL / CNC-CELL
---	---------------------

Deburr break all unmarked sharp edges .005 to 0.010

6A	METAL
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Form as per drawing (Note: -044 OPPOSITE)

6B	GA
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C'sink holes as per Dwg. D3159

7	FINISHING
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Chemical conversion coat as per QSI 005 4.1

8	STORES
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Pick:

Qty	Part number	Description
1	MS21061L06	Nutplate
2	MS20426AD3-4	Rivet

Batch

M19085
M15786

9	METAL
---	-------

Assemble as per dwg.

10	QC
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Inspect Level 5

11	STORES
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Identify and stock with P/N + B/W using fine point permanent ink marker

Loc. 88

12	EXPEDITING
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Close W/O
Inspect level 21
Cost/part

See 05/12/05 (7)

By	Date	Qty
RF	05.10.26	2

J.L	05.11.12	7
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J.L	05.11.13	7
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En	05/11/13	7
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SAP	05/11/13	7
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SB	05/11/14	7
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FF	05/11/15	7
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FF	05/11/15	7
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SB	05/11/28	7
----	----------	---

SB	05/11/29	7
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2	05.11.30	7
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6	05/12/01	7
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RF	05/12/02	7
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Rev	Date	Change	Revised By	Approved
A	02.05.13	New Issue	NG	CE 002/5/13
A1	03.03.20	Added C'sink	RF	

RELEASED

02/05/13

RF
04.11.29

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes ☒ No ☐ DQA: ☒ _____ Date: 05/12/02

QA: N/C Closed: _____ Date: _____

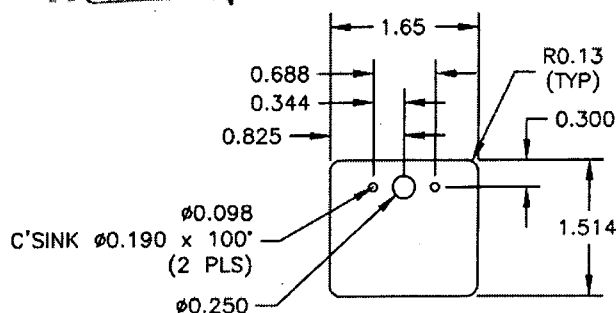
NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

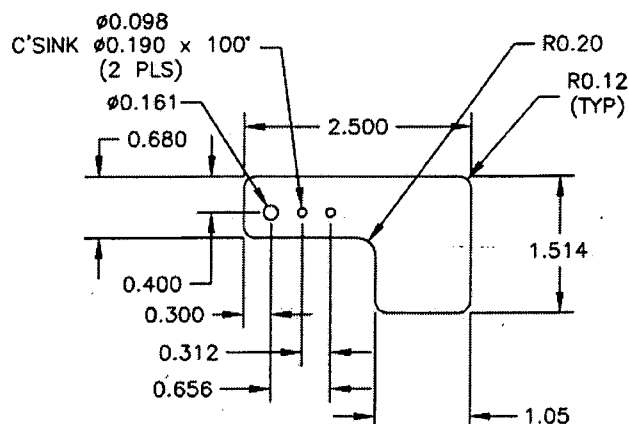


DESIGN	DRAWN BY	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED	APPROVED	DRAWING NO. D3159	REV. B SHEET 1 OF 1
DATE 04.10.18		TITLE BRACKET ASSEMBLY	SCALE 1:2
A	02.04.30	NEW ISSUE	
B	04.10.18	ADD PART MARKING	

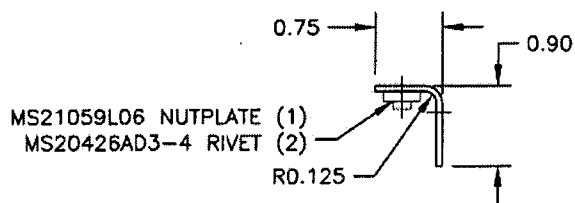
RELEASED
04.11.23



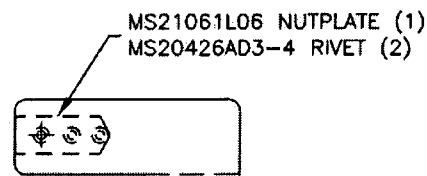
D3159-1 BRACKET FLAT PATTERN



D3159-3/-4 BRACKET FLAT PATTERN



D3159-041 BRACKET ASSEMBLY



D3159-043 BRACKET ASSEMBLY (SHOWN)
REPLACES PREMIER P/N B30-23000-259G (NEEDING
(D3159-044 BRACKET ASSEMBLY (OPPOSITE)).
REPLACES PREMIER P/N B30-23000-260 (REMOVED COPY)

NOTES:

- 1) MATERIAL: 6061-T6 (QQ-A-250/11) 0.063 THICK (REF. DART SPEC. M6061T6S.063)
- 2) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1
- 3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) BREAK EDGES 0.005 TO 0.010
- 5) ALL DIMENSIONS ARE IN INCHES
- 6) IDENTIFY D3159-041/-043/-044 WITH DART P/N USING FINE POINT PERMANENT INK MARKER

SUBJECT TO MOVEMENT
WITHOUT NOTICE

WORK ORDER

NO. 24687

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Job Costing Report

Dart Aerospace Ltd.
Hawkesbury

Oct 25, 2005
04:04 pm

Work Order No : 0024687
Project Name : D3159-044
Project For : WK546
Work Order Type : Main
Main WO Number :
House Part Number : D3159-044
Description : Bracket Assembly
Manufactured : Yes
Amount Req'd : 2
Amount Done : 0
Start Date : 10-25-05
Est Finish Date : 11-15-05
Act Finish Date :
Drawings Req'd : No
Ok for Approval :
Approval Rec'd :

Department Code:
Burden Flags : NNNNNNNN
WO Status : Open
Invoice State : Not Invoiced
Invoice Date :
Invoice Number :
Invoice Amount : 0.00
Order Entry No :
OE Value : 0.00
Est Mark Up : 0.000%
Actual Mark Up : 0.000%
\$0 Posted to Finished Goods

	Estimated	Actual	Var. %	Posted	To Post
Material Cost :	0.00	0.00	0.00	0.00	0.00
Engineering Hours :	0.00	0.00	0.00		
Engineering Cost :	0.00	0.00	0.00	0.00	0.00
Production Hours :	0.00	0.00	0.00		
Production Cost :	0.00	0.00	0.00	0.00	0.00
Packaging Hours :	0.00	0.00	0.00		
Packaging Cost :	0.00	0.00	0.00	0.00	0.00
OverHead Hours :	0.00	0.00	0.00		
OverHead Cost :	0.00	0.00	0.00	0.00	0.00
CNC Hours :	0.00	0.00	0.00		
CNC :	0.00	0.00	0.00	0.00	0.00
Misc. Hours :	0.00	0.00	0.00		
Misc. :	0.00	0.00	0.00	0.00	0.00
Burden :	0.00	0.00	0.00		
Total Cost :	0.00	0.00	0.00		
Mark up :	0.000	0.000			
Selling Cost :	0.00	0.00			

	Estimated	Actual
Labour Hrs/Amount Done :	0.00	0.00
Profits/(Loss) :	0.00	0.00

DART AEROSPACE LTD		Work Order: 24687
Description: bracket assembly		Part Number: D3159-044
Inspection Dwg: D3159	Rev: B	Page 1 of 1

FIRST ARTICLE INSPECTION CHECKLIST

☒ First Article ☐ Prototype

Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
None as WIP 24707						

Measured by: J.L.	Audited by: En	Prototype Approval: N/A
Date: 05.11.13	Date: 05.11.13	Date: N/A

Rev	Date	Change	Revised by	Approved
A		New Issue	KJ/RF	

Date: Friday, 11/18/2005 9:45:43 AM
User: Linda Lacelle

Process Sheet

Customer : CU-DAR001 Dart Helicopters Services	Drawing Name : BRACKET ASSEMBLY
Job Number : 24687	
Estimate Number : 10682	
P.O. Number :	Part Number : D3159044
This Issue : 11/18/2005 S.O. No. :	Drawing Number : D3159 REV B
Prsht Rev. : NC	Project Number :
First Issue : / / Type : R & D SM/MED FAB	Drawing Revision : B
Previous Run : 24707	Material :
Written By :	Due Date : 11/30/2005 Qty: 2 Um: Each
Checked & Approved By :	
Comment : Est A 02.05.13 New Issue NG	

Additional Product

Job Number:



Seq. #:	Machine Or Operation:	Description :
1.0	M6061T6S063	6061-T6 .063 Sheet
2.0	HAAS1	HAAS CNC VERTICAL MACHINING #1
Comment: HAAS CNC VERTICAL MACHINING #1 Machine as per Folio FA238		
3.0	QC2	INSPECT PARTS AS THEY COME OFF MACHINE
Comment: INSPECT PARTS AS THEY COME OFF MACHINE		
4.0	QC8	SECOND CHECK
Comment: SECOND CHECK		
5.0	HAAS1	HAAS CNC VERTICAL MACHINING #1
Comment: HAAS CNC VERTICAL MACHINING #1 Deburr break all unmarked sharp edges .005 to 0.010 Form as per drawing (Note: -044 OPPOSITE) C'sink holes as per Dwg D3159		

Date: Friday, 11/18/2005 9:45:44 AM
User: Linda Lacelle

Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: BRACKET ASSEMBLY

Job Number: 24687

Part Number: D3159044

Job Number:



Seq. #:	Machine Or Operation:	Description :
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6.0

HAND FINISHING1

HAND FINISHING RESOURCE #1



Comment: HAND FINISHING RESOURCE #1

Chemical Conversion Coat as per QSI 005 4.1

7.0

MS21061L06

Nutplate

8.0

MS20426AD34

RIVET

9.0

SMALL FAB 1

SMALL & MEDIUM FAB RESOURCE 1



Comment: SMALL & MEDIUM FAB RESOURCE 1

Assemble as per dwg.

10.0

QC5

INSPECT WORK TO CURRENT STEP



Comment: INSPECT WORK TO CURRENT STEP

11.0

PACKAGING 1

PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1

Identify with P/N and B/N using a permanent fine point marker, then Stock

Location: _____

12.0

DC

DOCUMENT CONTROL



Comment: DOCUMENT CONTROL

Inspection Level 21

Job Completion



Job Costing Report

Dart Aerospace Ltd.
Hawkesbury

Nov 08, 2005
12:44 pm

Work Order No : 0024687
Project Name : D3159-044
Project For : WK546
Work Order Type : Main
Main WO Number :
House Part Number : D3159-044
Description : Bracket Assembly
Manufactured : Yes
Amount Req'd : 2
Amount Done : 0
Start Date : 10-25-05
Est Finish Date : 11-15-05
Act Finish Date :
Drawings Req'd : No
Ok for Approval :
Approval Rec'd :

Department Code:
Burden Flags : NNNNNNNN
WO Status : Open
Invoice State : Not Invoiced
Invoice Date :
Invoice Number :
Invoice Amount : 0.00
Order Entry No :
OE Value : 0.00
Est Margin : 0.000%
Actual Margin : 0.000%
\$0 Posted to Finished Goods

	Estimated	Actual	Var. %	Posted	To Post
Material Cost :	0.00	0.00	0.00	0.00	0.00
Engineering Hours :	0.00	0.00	0.00		
Engineering Cost :	0.00	0.00	0.00	0.00	0.00
Production Hours :	0.00	0.00	0.00		
Production Cost :	0.00	0.00	0.00	0.00	0.00
Packaging Hours :	0.00	0.00	0.00		
Packaging Cost :	0.00	0.00	0.00	0.00	0.00
OverHead Hours :	0.00	0.00	0.00		
OverHead Cost :	0.00	0.00	0.00	0.00	0.00
CNC Hours :	0.00	0.00	0.00		
CNC :	0.00	0.00	0.00	0.00	0.00
Misc. Hours :	0.00	0.00	0.00		
Misc. :	0.00	0.00	0.00	0.00	0.00
Burden :	0.00	0.00	0.00		
Total Cost :	0.00	0.00	0.00		
Margin :	0.000	0.000			
Selling Cost :	0.00	0.00			

	Estimated	Actual
Labour Hrs/Amount Done :	0.00	0.00
Profits/(Loss) :	0.00	0.00